

## ABSTRACT OF THE DISCLOSURE

Disclosed is a packet communication apparatus of large capacity capable of realizing high throughput and packet priority control in packet switching for changing connection of input and output ports of a switch on a variable-length packet unit basis. A variable-length packet is divided into a group of cells in an ingress interface, and the cells are stored in VOQs divided in correspondence with destination output ports of a switch. For each of the VOQs, a corresponding first-cell storing register is provided. When a packet arrives at the head of the VOQ, the first cell indicating an output path of the packet is transferred to a first-cell storing register. Each ingress interface selects one of first cells of packets which can be output and transmits the selected one to the switch. The switch performs a scheduling process so as to select one first cell per output port. The ingress interface to which output permission is given by the scheduling process is connected to a desired output port, and continuously outputs the first cell and the subsequent cells stored in the VOQs to the output port on a packet unit basis.